

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 2-5. This sheet, which includes Figs. 2-5, replaces the original sheet including Figs. 2-5.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended, and in light of the following discussion, is respectfully requested.

After entry of the foregoing amendment, Claims 1-6 remain pending in the present application. Claims 1-6 are amended to address cosmetic matters of form only. The abstract is amended to address matters of form as are the legends of Figures 2-5 are now designated “Background Art.” No new matter has been added.

By way of summary, the Official Action presents the following issues: the drawings are objected to under M.P.E.P. § 608.02(g); the abstract stands objected to as to matters of form; the title of the invention is objected to as to matters of form; Claims 1 and 3 stand rejected under 35 U.S.C. § 102 as being unpatentable over Nakajima (U.S. Patent 6,069,659, hereinafter “Nakajima”); Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nakajima; and Claims 2 and 4 have been identified as reciting allowable subject matter.

Applicants appreciatively acknowledge the identification of allowable subject matter as currently recited in Claims 2 and 4. However, as Applicants believe that the balance of the claims also recite allowable subject matter, Claims 2 and 4 are maintained in dependent form herein.

OBJECTION TO THE DRAWINGS

With respect to the objection to the drawings outlined in paragraph 1 of the Official Action, Applicants have provided the legend “Background Art” to Figures 2-5 in accordance with the suggestions of the Office.

Accordingly, Applicants respectfully request that the objection the drawings be withdrawn.

OBJECTIONS TO THE ABSTRACT/TITLE

With regard to the objections to form outlined in paragraphs 2 and 3 of the Official Action, the Abstract has been amended and a new title has been submitted.

Accordingly, Applicants respectfully request that these objections to form be withdrawn.

REJECTION UNDER 35 U.S.C. § 102

The Official Action has rejected Claims 1 and 3 under 35 U.S.C. § 102 as being unpatentable over Nakajima. The Official Action contends that Nakajima describes all of the Applicants claimed features. Applicants respectfully traverse the rejection.

Applicants amended Claim 1 recites, *inter alia*, an imaging apparatus, including:

... an image pickup device formed from a plurality of pixels, each of which can perform any of an exposure operation and a reading operation thereof at a timing different from that of the other...

As noted in the Official Action at page 5, Nakajima describes a image sensor which is a CCD type. As described at pages 6-7 in the current specification (in relation to Figures 2-3), a CCD image sensor captures image data from columns of pixels (31) in a Transfer register (32). Conversely, image sensors such as a CMOS type is able to collect data from individual pixels (41). As the current claims clearly call out the difference between a CCD sensor and a sensor of a type (i.e., pixels, each of which can perform any of an exposure operation and a rating operation thereof a timing different from that of the other), these claims are clearly distinguishable over the CCD of Nakajima.

While the Office relies upon Figure 2 of Nakajima as describing CCD integration and CCD transfer taking place at different times, Applicants note the current claims require that the “different times” be with respect to “**a plurality of pixels, each of which...**”. Simply stated, the Applicants claims do not describe different timing operations of a CCD image

sensor, but a sensor in which the pixels are independently controlled. Indeed, the entire point of the Applicants advancements are directed toward this distinction.¹

Accordingly, Applicants respectfully request the rejection of the Claims 1 and 3 under 35 U.S.C. § 102 be withdrawn.

REJECTION - 35 USC § 103

The Official Action has rejected Claims 5 and 6 under 35 U.S.C. § 103 as being unpatentable over Nakajima. The Official Action contends that Nakajima disclose or suggest all of the features of the Applicants claims. Applicants respectfully traverse the rejection.

As noted above, Nakajima utilizes a CCD image pickup device. Conversely, the pending claims require an image pickup device formed of a plurality of pixels, each of which can perform any of an exposure operation and a reading operation at different timings with respect to the other. A CCD image pickup device is not capable of performing the claimed features as noted above.

Nevertheless, the Official Action takes the position that “it is well known in the art to substitute CMOS image sensors which are a type of XY addressable image sensor, for CCD sensors. However, the above statement misses the point of a proper showing under 35 U.S.C. § 103. For a proper showing, the Office must demonstrate that it would have been obvious to use the teachings of the art in view of Nakajima. Thus, whether or not CMOS sensors were known is not the question, the question is whether one of skill in the art would have considered it obvious to modify Nakajima based on this alleged knowledge.

In this regard, Applicants note that changing the Nakajima image sensor from a CCD sensor to a CMOS would of course, change the basic operating principal of Nakajima which is built around a CCD sensor.

¹ For example, see the specification at page 1.

It is well established that, if a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) In this instance, the suggested combination of references would require a substantial reconstruction and redesign of the elements shown in Nakajima as well as a change in the basic principle under which the CCD construction was designed to operate.

As pointed out in the Official Action at page 5, the CCD sensor and CMOS image sensor are systemically different with respect to their method of operation, addressability, etc. Accordingly, Applicants respectfully request the rejection of Claims 5 and 6 under 35 U.S.C. § 103.

CONCLUSION

Consequently, in view of the foregoing amendment and remarks, it is respectfully submitted that the present application is in condition for allowance, and such action is respectfully requested at an early date.

Respectfully submitted,

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